

REMARKS/ARGUMENTS

Claims 1-9 are pending in the instant application. Claims 1-9 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combined teachings of Koide et al., in Chem. Pharm. Bull. Vol. 41, No. 6, pages 1030-1034, and Musiol et al., in Biopolymers, Vo. 34, pages 1553-1562. The application has been amended. The claims have been amended to obviate the rejections under 35 U.S.C. §112. None of the amendments constitute new matter in contravention of 35 U.S.C. §132. Reconsideration is respectfully requested.

Claims 1-9 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. These rejections are respectfully traversed.

Claim 1 is objected to for reciting acronyms without the compound name. Claim 1 has been amended to recite the compound names prior to its acronym. In claim 1 the acronyms Acm, MBzl and tBu are spelled completely as acetamidomethyl, 4-methylbenzyl and t-butyl respectively. Acm, MBzl and tBu are defined on page 1 lines 7-9 of the specification. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 2 and 4 are objected to for reciting an acronym without its compound name. Claim 2 has been amended to recite the acronym after the compound name. The acronym TFA is inserted in claim 2 adjacent to the complete spelled trifluoroacetic acid. TFA is defined at page 8 line 25. Reconsideration and withdrawal of the rejection are respectfully requested.

Claim 3 is objected to for reciting an acronym without its compound name. Claim 3 has been amended to recite the compound name. In claim 3 the acronym DMSO is spelled completely as dimethyl sulphoxide. DMSO is defined at page 8 line 36. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 8-9 are objected to for reciting the term "or above". This rejection is respectfully traversed. Applicants respectfully submit that the temperature ranges in claims 8-9 are set with the highest limit according to Example 5 of the specification. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 5-7 stand rejected under 35 U.S.C. §112 for depending from rejected claims. As the rejections for claims 1-4 have been obviated or traversed, Applicants submit that this rejection is also traversed. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combined teachings of Koide et al., in Chem. Pharm. Bull. Vol. 41, No. 6, pages 1030-1034, and Musiol et al., in Biopolymers, Vo. 34, pages 1553-1562. This rejection is respectfully traversed.

The present invention discloses a simple one step strategy for the formation of disulphide bonds from a protected peptide. Used in a preferred embodiment it allows the formation of a number of disulphide linkages in a simple one step process the deprotection being controlled simply by temperature adjustment. None of the citations teaches that deprotection of a thiol and the subsequent formation of disulphide bonds could take place using such a simple acid/oxidation agent mixture.

Koide et al. describes thiol deprotection using TFA/DMSO in conjunction with a variety of protecting groups. As shown in Table 1 of Koide et al., Acm deprotection using the DMSO/TFA oxidation failed. Further the Examiner draws the

attention to a previous step where TFA was used for the deprotection by removing the “MBzl” group. It must be noted that the definition of MBzl in Koide et al. is different from the definition employed in the present application. In the References and Notes section, point 1, at the end of the Koide paper, it is explicitly stated that MBzl is 4-methoxybenzyl and not 4-methylbenzyl. Therefore there is no disclosure of the successful deprotection of an Acm, tBu or 4-methylbenzyl protected thiol using a DMSO/TFA mixture.

The Musio et al. teaches deprotection by removing tBu with TFA , but does not disclose the use of DMSO with TFA.

Moreover, given the disclosure in Koide et al., the person skilled in the art would conclude that this was not possible. Koide et al. teaches that Acm protected thiols resisted attack by DMSO/TFA for 12 hours. Hence, the teaching of Koide et al. suggests that the present invention would not work. Applicants respectfully submit that as Koide et al. teach away from the present invention, the combination cited by the Examiner fails to render the present invention obvious. As a result, the present invention is patentably distinct thereover. Reconsideration, and withdrawal of the rejection are respectfully requested.

In view of the amendments and remarks hereinabove, Applicants respectfully submit that the present application, including claims 1-9, are in condition for allowance. Favorable action thereon is respectfully requested.

Appl. No. 10/052,300
Amdt. Dated Nov. 5, 2003
Reply to Office action of May 5, 2003

Any questions with the foregoing may be directed to Applicants' undersigned counsel at the telephone number given below.

Respectfully submitted,



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